

**REMARKS****I. Status of the Claims**

Claims 1-64 are pending in the application. Claims 1-4, 9, 10, 12, 13, 20-23, 28-35, 37, 38, 43-46, 53-55 and 59-64 are rejected. Claims 5-8, 11, 14-19, 24-27, 36, 39-42, 47-52 and 56-58 are objected to as depending on a rejected base claim but would allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In the amendments above, Applicants have rewritten claims 5-8, 36, and 39-42 in independent form incorporating all of the limitations of the base claim and any intervening claims. These amendments do not change the scope or content of any of claims 5-8, 36 and 39-42.

Applicants have also amended claims 1 and 34 to recite a method for producing the elastomer composite. Support for this amendment may be found throughout the specification, figures, claims and abstract as originally filed. Support may be found, for example, at numbered paragraph 13 on page 3.

Applicants have also amended claims 31-33 to depend from claim 22.

Applicant has also amended claim 22 to correct minor typographical error.

Applicants request entry of the above amendments and reconsideration of the claims.

**II. Claims 31-33 Meets the Requirements of 112, Second Paragraph**

Claims 31-33 are rejected under § 112, second paragraph. Applicants traverse the rejection in view of the amendments to claims 31-33.

Claims 31-33 have been amended above to depend from claim 22. In view of the amendments, antecedent basis for the treating step exists. Applicants respectfully request withdrawal of the rejection.

**III. Claims 1-4, 9, 10, 12, 13, 20, 34, 35, 37, 38 and 43-46  
are Patentable over Laurie in view of Cohen and Johnson**

Claims 1-4, 9, 10, 12, 13, 20, 34, 35, 37, 38 and 43-46 are rejected under § 103(a) over Laurie (US 4,057,141) in view of Cohen (5,914,364) and Johnson (4,537,928). Applicants traverse the rejection.

Each of claims 1-4, 9, 10, 12, 13, 30, 34, 35, 37, 38 and 43-46 is patentable over Laurie in view of Cohen and Johnson, because the combination of these citations fails to teach or suggest all the elements of any of the claims.

With reference to claim 1, Laurie, either alone or in combination with Cohen and/or Johnson, fails to teach or suggest a bale of elastomer composite comprising elastomer composite pieces, wherein the elastomer composite pieces comprise an elastomer and filler, and wherein the bale has a void volume of at least 3%, the elastomer composite produced by a method comprising feeding a continuous flow of first fluid comprising elastomer latex to a mixing zone of a coagulum reactor defining an elongate coagulum zone extending from the mixing zone to a discharge end, feeding a continuous flow of second fluid comprising particulate filler under pressure to the mixing zone of the coagulum reactor to form a mixture with the elastomer latex, the mixture passing as a continuous flow to the discharge end and the particulate filler being effective to coagulate the elastomer latex, wherein feeding of the second fluid against the first fluid within the mixing zone is sufficiently energetic to substantially completely coagulate the elastomer latex with the particulate filler prior to the discharge end, and discharging a substantially continuous flow of elastomer masterbatch from the discharge end of the coagulum reactor. No such method of producing elastomer composite is taught or suggested in any of the citations. Thus, claim 1 is patentable over the citations.

Each of claims 2-4 depends directly from claim 1 and is patentable over Laurie in combination with Cohen and Johnson for at least the same reasons as claim 1 and for the additional element(s) recited therein.

With reference to claim 9, Laurie, either alone or in combination with Cohen and/or Johnson, fails to teach or suggest a method of producing a bale of elastomer composite, comprising the steps of: mixing an elastomer latex with a filler to form an elastomer composite; treating the elastomer composite to form elastomer composite

pieces; and forming the elastomer composite pieces into a bale having a void volume of at least 3%. In particular, the pieces cited by the Examiner are not formed by treating the elastomer composite to form elastomer composite pieces. Accordingly, claim 9 is patentable over the citations either alone or in combination.

Each of claims 10, 12, 13 and 20 depends directly from claim 9 and is patentable over Laurie for at least the same reasons as claim 9 and for the additional element(s) recited therein.

Claim 34 is patentable over Laurie in view of Cohen and Johnson because the citations, either alone or in combination, fail to teach or suggest a container wherein at least a portion of the container is occupied by elastomer composite pieces comprising an elastomer and filler, and wherein the occupied portion of the container has a void volume of at least 3%, the elastomer composite produced by a method comprising feeding a continuous flow of first fluid comprising elastomer latex to a mixing zone of a coagulum reactor defining an elongate coagulum zone extending from the mixing zone to a discharge end, feeding a continuous flow of second fluid comprising particulate filler under pressure to the mixing zone of the coagulum reactor to form a mixture with the elastomer latex, the mixture passing as a continuous flow to the discharge end and the particulate filler being effective to coagulate the elastomer latex, wherein feeding of the second fluid against the first fluid within the mixing zone is sufficiently energetic to substantially completely coagulate the elastomer latex with the particulate filler prior to the discharge end, and discharging a substantially continuous flow of elastomer masterbatch from the discharge end of the coagulum reactor. No such method of producing elastomer composite is taught or suggested in any of the citations. Thus, claim 34 is patentable over the citations either alone or in combination.

Each of claims 35, 37 and 38 depends directly from claim 34 and is patentable over Laurie in view of Cohen and Johnson for at least the same reasons as claim 34 and for the additional element(s) recited therein.

Claim 43 is patentable over Laurie in view of Cohen and Johnson because the citations, either alone or in combination, fail to teach or suggest a method of packaging elastomer composite pieces in a container wherein at least a portion of the container is occupied by elastomer composite pieces comprising the following steps: mixing an

elastomer latex with filler to form an elastomer composite; treating the elastomer composite to form elastomer composite pieces; and packaging the elastomer composite pieces in a container such that the occupied portion of the container has a void volume of at least 3%. In particular, the pieces asserted by the Examiner are not formed by treating the elastomer composite to form elastomer composite pieces. Accordingly, claim 43 is patentable over the citations either alone or in combination.

Each of claims 44-46 depends directly from claim 43 and is patentable over Laurie in view of Cohen and Johnson for at least the same reasons as claim 43 and for the additional element(s) recited therein.

Applicants respectfully request withdrawal of the rejection.

**IV. Claims 21-23, 28-33, 53-55 and 59-64 are Patentable over Laurie in view of Chen and Johnson and further in view of Drews**

Claims 21-23, 28-33, 53-55 and 59-64 are rejected under § 103(a) over Laurie (US 4,057,141) in view of Cohen (5,914,364) and Johnson (4,537,928) and further in view of Drews (US 5,316,708). Applicants traverse the rejection.

Claim 21 is patentable over the citations because no proper combination of the citations teaches or suggests a method of producing an elastomer composite blend, the method comprising: blending a bale of elastomer composite pieces having a void volume of at least 3% with additional elastomer material comprising at least additional elastomer, to form an elastomer composite blend. Claim 53 is patentable over the citations because no proper combination of the citations teaches or suggests a method of producing an elastomer composite blend, the method comprising providing a container wherein at least a portion of the container is occupied by elastomer composite pieces and wherein the occupied portion of the container has a void volume of at least 3%; and blending the elastomer composite pieces with additional elastomer material comprising at least additional elastomer, to form an elastomer composite blend.

In particular, Laurie in combination with Cohen and Johnson fails to disclose blending of its pieces with any additional elastomer. That is, there is no suggestion or motivation in Laurie, either alone or in combination with Cohen and Johnson, to blend

*Amendment in Response to Office Action*

*U.S. Application No. 10/039,774*

*Page 16 of 17*

the pieces of Laurie with any additional elastomer. This deficiency is not cured by Drews because Drews fails to teach or suggest blending of a bale or a container with additional elastomer. Instead, Drew discloses that loose recycled tire pieces are mixed with liquid latex material. See Col. 2, lines 27-28. Thus, the combination of the citations fails to render either of claims 21 or 53 obvious.

Each of claims 22, 23 and 28-33 depends directly or indirectly from claim 21 and is patentable over the citations for at least the same reasons as claim 43 and for the additional element(s) recited therein. Each of claims 54, 55 and 59-64 depends directly or indirectly from claim 21 and is patentable over the citations for at least the same reasons as claim 43 and for the additional element(s) recited therein.

Applicants respectfully request withdrawal of the rejection.

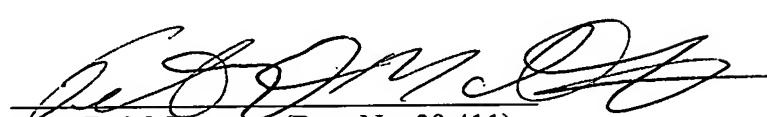
**V. Conclusion**

In view of the foregoing amendments and remarks, all claims pending in the application are in condition for immediate allowance.

Respectfully submitted,  
Wang et al.

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